

Momelotinib

SYN-1035

N-(cyanomethyl)-4-(2-(4-morpholinophenylamino)pyrimidin-4-yl)benzamide

CAS Registry No.: 1056634-68-4

Smiles String:

c1cc(ccc1c2ccnc(n2)Nc3ccc(cc3)N4CCOC4)C(=O)NCC#N

Molecular Weight: 414.47

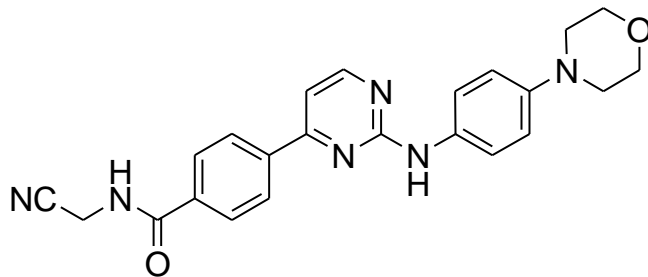
Molecular Formula: C₂₃H₂₂N₆O₂

Lot Number: Refer to vial

¹H-NMR: Available on request

HPLC (Purity): > 95.0% @ 254 nm

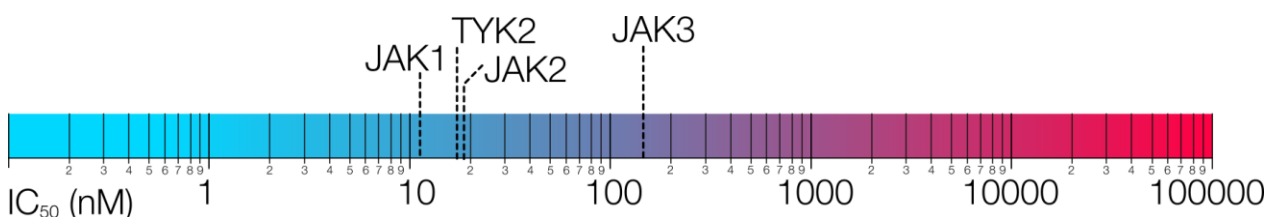
ES-MS: Available on request



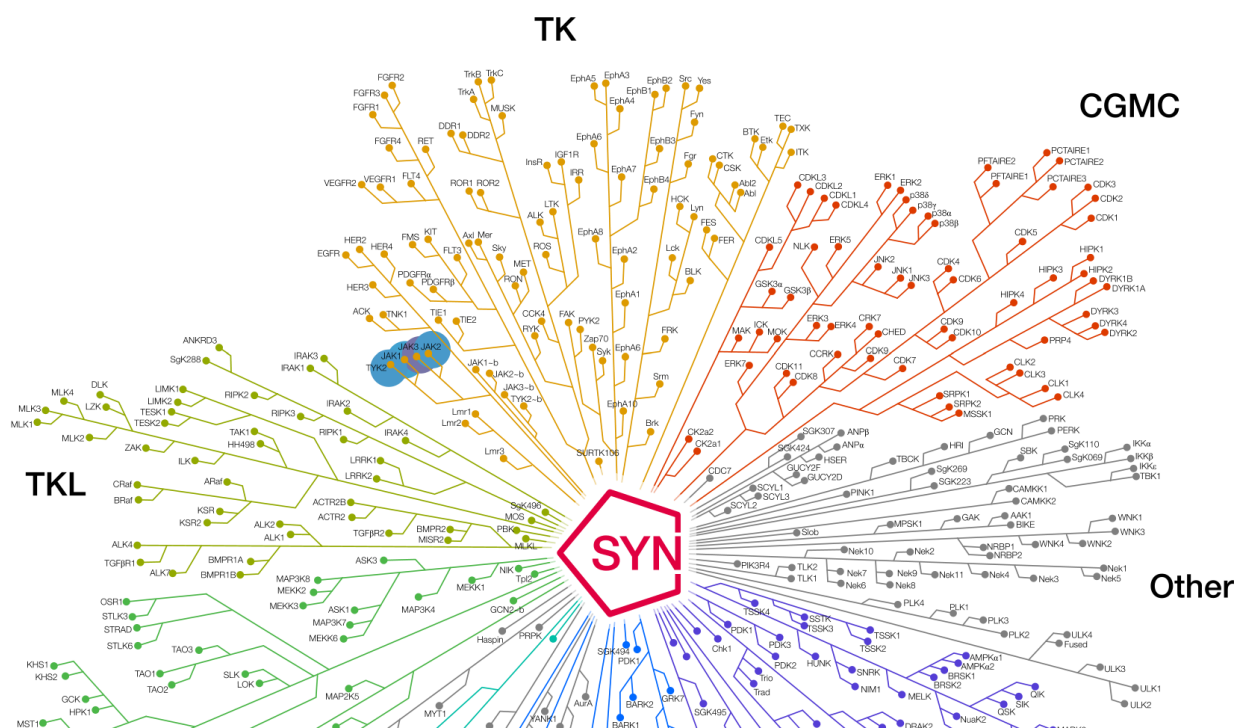
Description:

CYT387 is selective inhibitor of JAK1 and JAK2 kinases including the JAK2V617F mutant. Using ATP kinase assays IC₅₀ values for JAK1 (11nM), JAK2, (18nM), JAK2, JAK2V617F (23nM) JAK3 (155nM), and TYK2 (17nM). In testing kinase arrays, CYT387 also had activity (defined as an IC₅₀ < 100nM) detected against CDK2/cyclin A, MAPK8 (JNK1), PRKCN (PKD3), PRKD1 (PKC μ), ROCK2, and TBK1 kinase as well (Tyner et al 2010).

Biological Activity



Kinome Mapping



Shipping and Storage Temperature

Shipping:
Ambient

Storage:
2 years -20C, Powder 1 month, -4C in DMSO, More than one month -80C in DMSO

Solubility

> 20mM in DMSO

Preparing Stock Solutions

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.4145	4.1450	8.2900	20.7250

References

1. Burns CJ, Bourke DG, Andrau L, Bu X, Charman SA, Donohue AC, Fantino E, Farrugia M, Feutrell JT, Joffe M, Kling MR, Kurek M, Nero TL, Nguyen T, Palmer JT, Phillips I, Shackelford DM, Sikanyika H, Styles M, Su S, Treutlein H, Zeng J, Wilks AF. Phenylaminopyrimidines as inhibitors of Janus kinases (JAKs). *Bioorg Med Chem Lett*. 2009 Oct 15;19(20):5887-92. doi: 10.1016/j.bmcl.2009.08.071. Epub 2009 Aug 23. PubMed PMID: 19762238.
2. Tyner, Jeffrey W., et al. "CYT387, a novel JAK2 inhibitor, induces hematologic responses and normalizes inflammatory cytokines in murine myeloproliferative neoplasms." *Blood* 115.25 (2010): 5232-5240.

Ordering Information

To order more of this or any other SYNkinase compound, go to synkinase.com, Call us Toll Free (US Only) at 1- 877-854-6273 or email orders@synkinase.com.

Product Datasheet (Rev. 1.1)